

WHAT IS CLAIMED IS:

1. A conductive roller comprising a core metal; and a conductive elastic layer disposed on a peripheral surface of said core metal,

5       said conductive roller having an electrostatic capacity not more than 50pF at 100Hz and an electric resistance not less than  $10^5\Omega$  nor more than  $10^9\Omega$  at an applied voltage 1000V.

2. The conductive roller according to claim 1, having an electrostatic capacity not less than 10pF at 100Hz.

10      3. The conductive roller according to claim 1, wherein an electrostatic capacity  $C(L)$  at an alternating low frequency of  $10^2\text{Hz}(L)$  and an electrostatic capacity  $C(H)$  at an alternating high frequency of  $10^5\text{Hz}(H)$  satisfy a relationship of:

$$15 \quad 0 < (C(L) - C(H)) / (\log_{10}Hz(H) - \log_{10}Hz(L)) < 10$$

4. The conductive roller according to claim 2, wherein an electrostatic capacity  $C(L)$  at an alternating low frequency of  $10^2\text{Hz}(L)$  and an electrostatic capacity  $C(H)$  at an alternating high frequency of  $10^5\text{Hz}(H)$  satisfy a relationship of:

$$0 < (C(L) - C(H)) / (\log_{10}Hz(H) - \log_{10}Hz(L)) < 10$$

20      5. The conductive roller according to claim 1, wherein said conductive elastic layer is composed of a rubber composition consisting of a rubber component and an ionic-conductive filler added to said rubber component; and

said ionic-conductive filler consists of a lithium salt, a potassium salt, a quaternary ammonium salt or an imidazolyl salt each having a fluoro group and a sulfonyl group capable of dissociating into anions and cations.

5       6. The conductive roller according to claim 2, wherein said conductive elastic layer is composed of a rubber composition consisting of a rubber component and an ionic-conductive filler added to said rubber component; and

10      said ionic-conductive filler consists of a lithium salt, a potassium salt, a quaternary ammonium salt or an imidazolyl salt each having a fluoro group and a sulfonyl group capable of dissociating into anions and cations.

15      7. The conductive roller according to claim 3, wherein said conductive elastic layer is composed of a rubber composition consisting of a rubber component and an ionic-conductive filler added to said rubber component; and

20      said ionic-conductive filler consists of a lithium salt, a potassium salt, a quaternary ammonium salt or an imidazolyl salt each having a fluoro group and a sulfonyl group capable of dissociating into anions and cations.

25      8. The conductive roller according to claim 1, wherein said conductive elastic layer is composed of a rubber composition containing a rubber component consisting of at least one rubber selected from among ethylene-propylene-diene terpolymer, acrylonitrile butadiene rubber, and butadiene

rubber; and not less than 0.01 parts by weight nor more than 20 parts by weight of an anion-containing salt having a fluoro group and a sulfonyl group added to 100 parts by weight of said rubber component as an ionic-conductive filler.

5       9. The conductive roller according to claim 2, wherein said conductive elastic layer is composed of a rubber composition containing a rubber component consisting of at least one rubber selected from among ethylene-propylene-diene terpolymer, acrylonitrile butadiene rubber, and butadiene rubber; and not less than 0.01 parts by weight nor more than 20 parts by weight of an anion-containing salt having a fluoro group and a sulfonyl group added to 100 parts by weight of said rubber component as an ionic-conductive filler.

10      10. The conductive roller according to claim 3, wherein said conductive elastic layer is composed of a rubber composition containing a rubber component consisting of at least one rubber selected from among ethylene-propylene-diene terpolymer, acrylonitrile butadiene rubber, and butadiene rubber; and not less than 0.01 parts by weight nor more than 20 parts by weight of an anion-containing salt having a fluoro group and a sulfonyl group added to 100 parts by weight of said rubber component as an ionic-conductive filler.

15      11. The conductive roller according to claim 4, wherein said conductive elastic layer is composed of a rubber composition containing a rubber component consisting of at

least one rubber selected from among ethylene-propylene-diene terpolymer, acrylonitrile butadiene rubber, and butadiene rubber; and not less than 0.01 parts by weight nor more than 20 parts by weight of an anion-containing salt having a fluoro group and a sulfonyl group added to 100 parts by weight of said rubber component as an ionic-conductive filler.